

Date: Thursday, 9/20/2007 3:26:24 PM
User: Kim Johnston

Process Sheet

Split

Customer : CU-DAR001 Dart Helicopters Services	Drawing Name : EXTRUSION 'I' BEAM TUBE 4"
Job Number : 34729	
Estimate Number : 10154	
P.O. Number : N/A	Part Number : D25001190
This Issue : 9/20/2007 S.O. No. : N/A	Drawing Number : D2500 REV G
Prsht Rev. : NC	Project Number : N/A
First Issue : N/A	Drawing Revision : G
Previous Run : 29602	Material : N/A
Type : PURCHASED PARTS	Due Date : 10/10/2007
Written By : <u>JA</u>	Qty: <u>63</u> Um: Each
Checked & Approved By : <u>JA 07.09.20</u>	
Comment : Est: G 02.09.05 Added DSK 066 KJ/RF	
est H 07.07.06 rev G dwg EC	

Additional Product

Job Number:



Seq. #: Machine Or Operation: Description :

1.0

PG

PURCHASING



Comment: PURCHASING

Issue P/O: 4645

- a) Extrude as per Dwg D2500
- b) Material: 6061-T6 (QQ-A-200/8)
- c) Minimum yield tensile strength = 35 ksi
- d) Minimum ultimate tensile strength = 38 ksi
- e) Minimum elongation = 8%
- f) Order at 190" long
- g) Bon L Canada Inc. tool # 897105
- h) To be packed per DSK 066
- i) Pull test to ASTM standard B221 required.
- j) Material certification is required

07/09/21
(80)

2.0

D25001190P

Ext'n 'I' Beam Tube 4"



Comment: Qty.: 1.0000 Each(s)/Unit Total : 80.0000 Each(s)
EXTRUSION 'I' BEAM TUBE 4"

3.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Receive & Inspect For Transit Damage
Ensure material certification is attached

07/10/01 (63)

4.0

QC6

DIMENSIONAL CHECK



Comment: DIMENSIONAL CHECK

Inspect dimensions per Dwg D2500
Check Pull test per Dwg D2500 for compliance page attached.

07/10/02

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes ☐ No ☒ DQA: ☒ Date: 04/01/10
 QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Thursday, 9/20/2007 3:26:25 PM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: EXTRUSION 'I' BEAM TUBE 4"

Job Number: 34729

Part Number: D25001190

Job Number:



Seq. #:

Machine Or Operation:

Description :

Check hardness with Webster tester

5.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: _____

2/10/11 SP (63x)

6.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

(63)
2/10/12

Job Completion



LI 7.10.12

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



DESIGN <i>[Signature]</i>	DRAWN BY <i>[Signature]</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D2500	REV. G SHEET 1 OF 3
DATE 07.04.17		TITLE EXTRUSION	SCALE NTS
A	96.03.19	NEW ISSUE	
B	96.03.24	CHANGE INTERNAL WEB	
C	96.04.26	ADD D2500-3 WEB	
D	96.10.07	ADD MATERIAL PROPERTIES	
E	96.10.24	CHANGE MATERIAL TEMPER	
F	97.09.29	CHANGE MAT. TO 6061-T6	
G	07.04.17	ADD NOTES 3,5,6	

RELEASED
07.06.28 *[Signature]*

1. MATERIAL: 6061-T6 (QQ-A-200/8)

MINIMUM TENSILE YIELD STRENGTH = 35 KSI
MINIMUM ULTIMATE TENSILE STRENGTH = 38 KSI
MINIMUM ELONGATION = 8%

A SAMPLE FROM EACH BATCH WILL BE PULL TESTED TO
ASTM STANDARD B221 BY AN APPROVED TESTING FACILITY
TO ENSURE THAT THE BATCH MEETS THE ABOVE
MINIMUM MECHANICAL PROPERTIES

2. BREAK ALL SHARP CORNERS 0.010 MAX
3. ALL DIMENSIONS ARE IN INCHES
4. TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE
NOTED.

5. FOR D2500-1 PART NUMBER IS D2500-1-XXX WHERE XXX IS
CUT LENGTH (EX. D2500-1-190 IS 190" LONG)
D2500-1 EXTRUSION MANUFACTURED FROM:

- A) BON L DIE # 897015 -> PREFERRED
B) CARADON MIDEAST DIE # PAH-28030
C) CARADON MTL DIE # MH-18868

6. FOR D2500-3, PART NUMBER IS D2500-3-XXX WHERE XXX IS
CUT LENGTH IN INCHES (EX. D2500-3-100 IS 100" LONG)
D2500-3 EXTRUSION MANUFACTURED FROM:

- A) CARADON INDALEX DIE # MS-18867

TOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 34729

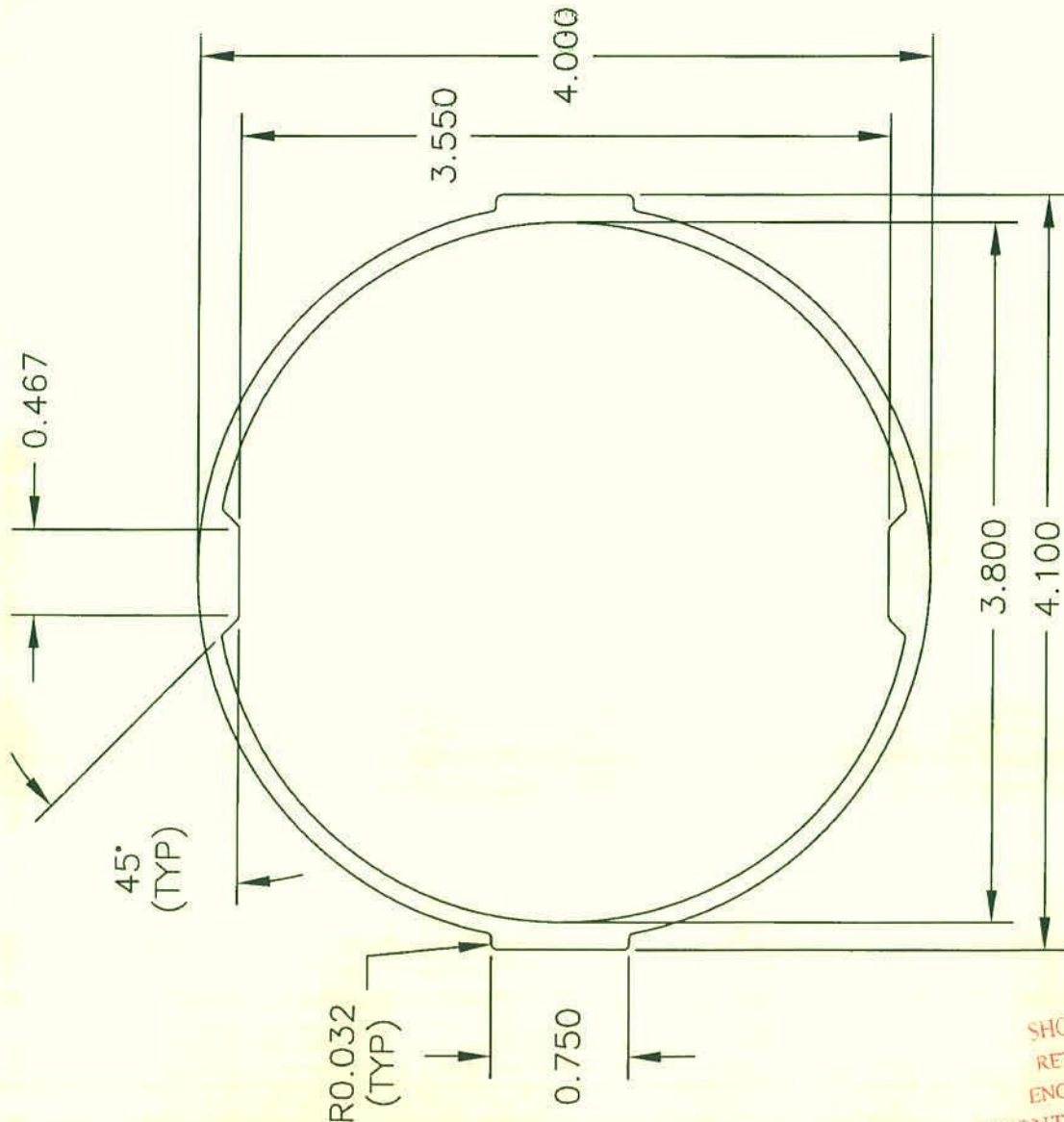
Copyright © 1996 by DART AEROSPACE LTD

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED
OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.



DESIGN [Signature]	DRAWN BY RH	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED [Signature]	APPROVED [Signature]	DRAWING NO. D2500	REV. G SHEET 2 OF 3
DATE 07.04.17		TITLE EXTRUSION	SCALE 1:1

RELEASED
07.06.28



D2500-1

SHOP COPY
RETURN TO
ENGINEERING
INCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 34729

Copyright © 1996 by DART AEROSPACE LTD

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

1. The first part of the document is a list of names and dates. The names are: John Doe, Jane Smith, and Bob Johnson. The dates are: 1990, 1991, and 1992. The list is as follows:

Name	Date
John Doe	1990
Jane Smith	1991
Bob Johnson	1992

2. The second part of the document is a list of names and dates. The names are: John Doe, Jane Smith, and Bob Johnson. The dates are: 1990, 1991, and 1992. The list is as follows:

Name	Date
John Doe	1990
Jane Smith	1991
Bob Johnson	1992

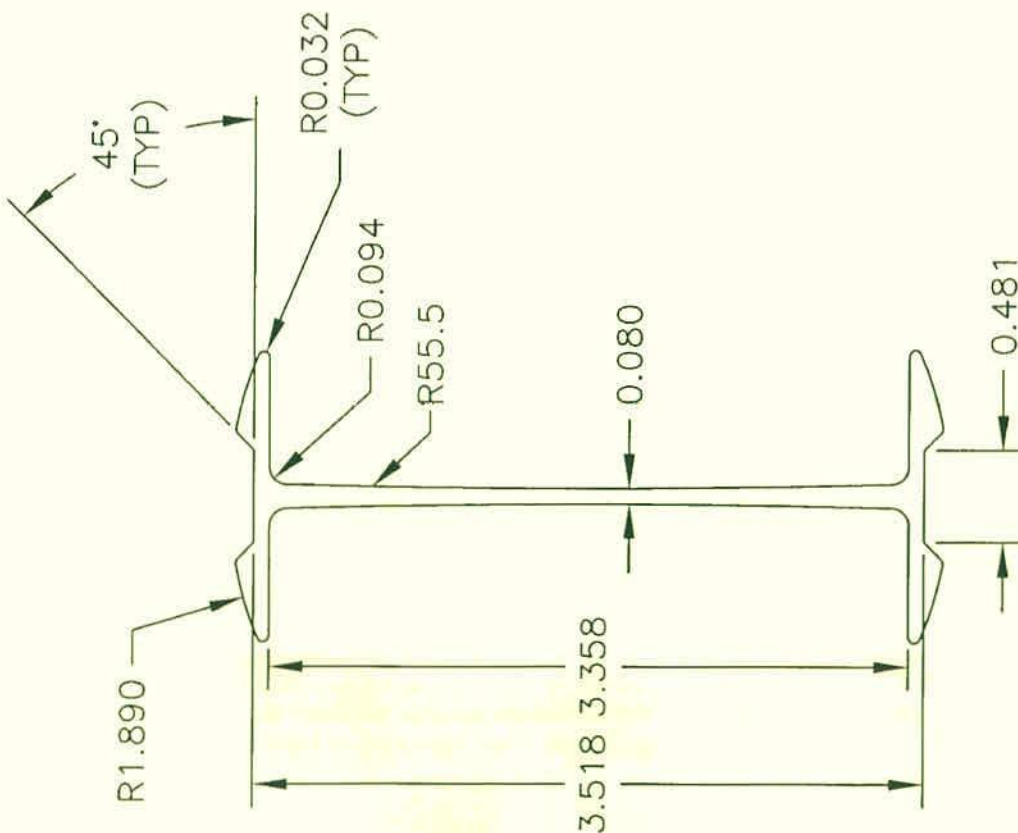
3. The third part of the document is a list of names and dates. The names are: John Doe, Jane Smith, and Bob Johnson. The dates are: 1990, 1991, and 1992. The list is as follows:

Name	Date
John Doe	1990
Jane Smith	1991
Bob Johnson	1992



DESIGN <i>[Signature]</i>	DRAWN BY <i>PH</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D2500	REV. G SHEET 3 OF 3
DATE 07.04.17		TITLE EXTRUSION	SCALE 1:1

RELEASED
07.06.28 *[Signature]*



D2500-3

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 34729

Copyright © 1996 by DART AEROSPACE LTD

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

THE UNIVERSITY OF CHICAGO LIBRARY
1100 EAST 58TH STREET
CHICAGO, ILL. 60637
TEL: 773-936-5000
FAX: 773-936-5001
WWW.CHICAGO.LIBRARY.EDU

THE UNIVERSITY OF CHICAGO LIBRARY

**BON L CANADA INC**1850 CLEMENTS ROAD
PICKERING, ON L1W 3R8**CERTIFICATE OF COMPLIANCE**

Cert Date	Cert No	Sales Order	Page
09/30/07	166849	87380	1
Cust PO	B/I No	Lot	Date
4645	00359333	87380010	9/30/07

Sold To	Ship To
46024 DART AEROSPACE LTD. 1270 ABERDEEN ST. HAWKESBURY, ON K6A 1K7	46024 DART AEROSPACE LTD. 1270 ABERDEEN ST. HAWKESBURY, ON K6A 1K7

Item No	Part No	Item Description	Cust Part
1.000	DAA-897105-2	190" Mill 6061 T6	D2500-1-190
Gross Weight	816 KGS		
Net Qty	798 KG	63 PC	304 M 3 PKG
Specification	AMS-QQ-A-200/8 & ASTM B221-00		
Dis Desc			

Mechanical Tests:

Test No.	Tensile MPA / KSI	Yield MPA / KSI	%Elongation	Conductivity	Bend/ Drift HREW
1	299.2 / 43.4	276.3 / 40.1	10.4	.0	92

Chemical Limits:

	SI	FE	CU	MN	MG	CR	ZN	TI	OTHER
MIN:	.40	.00	.15	.00	.80	.04	.00	.00 EA:	.05
MAX:	.80	.70	.40	.15	1.20	.35	.25	.15 TOT:	.15

This will certify that the material described herein has been inspected and tested in accordance with Bon L Canada's standard sampling and testing procedures or in accordance with the requirements of any specifications forming a part of the material description to the extent indicated herein. Data of chemical composition for the material and test results from samples representative of the material are set forth above hereof or in any attachments hereto. This information shows that the material meets the applicable requirements. Inspection and test records are maintained on file. This certificate shall be deemed apart of and subject to the terms and conditions of warranty set forth on the reverse side of our order acknowledgement form. No other warranties are applicable.

Conchita Ko, QA Manager Signed for Bon L Canada



BON L CANADA INC.

THE WILLIAM L. BONNELL COMPANY, INC.
BON L MANUFACTURING COMPANY
SUSIDIAIRES DE TREDEGAR CORPORATION
FILIALES DE LA CORPORATION TREDEGAR



INVOICING COMPANY AND LOCATION
BUREAU DE FACTURATION

BON L CANADA INC
1850 CLEMENTS ROAD
PICKERING ON L1W 3R8

SHIPPING MANIFEST BORDEREAU D'EXPÉDITION

MANIFEST DATE/DATE D'EXPÉDITION

09-30-07

MANIFEST NUMBER/N° D'EXPÉDITION

611861

SALES ORDER NUMBER/N° DE COMM.

87380

REFER TO
THESE NUMBERS ON
ALL CORRESPONDENCE
RÉFÉREZ-VOUS À CES
NUMÉROS POUR TOUTE
CORRESPONDANCE

CREDIT REP
REP. DU CRÉDIT
HAMBROOK, PAU
905-508-3250

SALES REP
REP. DES VENTES

FIELD SALES REP
REP. RÉGIONAL DES VENTES
Kutter A
450-435-6551

CUST SERVICE REP
REP. SERVICE CLIENTÈLE
Burton D
905-427-2227

SHIP TO/EXPÉDIÉ À
DART AEROSPACE LTD.
1270 ABERDEEN ST.
HAWKESBURY
K6A 1K7

SOLD TO/VENDU À
DART AEROSPACE LTD.
1270 ABERDEEN ST.
HAWKESBURY
K6A 1K7

O/P

PHONE 613-632-5200

PHONE 613-632-5200

CUSTOMER ID/N° DU CLIENT

46024

ORDER DATE
DATE DE LA COMMANDE

09/21/07

CUST. P.O. NO./N° DE COMM. DU CLIENT

4545

JOB/PROJET

LOCUS/INE

PIC

TRAILER NO./N° DE REMORQUE

57373

SALESMAN/VENDEUR

59358

BILL OF LADING NUMBER/N° DE CONNAISSANCEMENT

00359333

ITEM NO. N° ITEM	ORDER QUANTITY QTE COMMANDEE	UNIT UNITE	PREVIOUS SHIPPED QTY. QTE DEJA EXPEDIEE	MFG. PART NUMBER N° DE PIÈCE DU FOURNISSEUR	ALLOY & TEMPER ALLIAGE & TREMPÉ	FINISH DESCRIPTION DESC. DE LA FINITION	THIS SHIPMENT/CETTE EXPÉDITION			UNIT UNITE	QUANTITY DUE QUANTITE PREVUE
							NO. PKGS. N° DE PAQUETS	GROSS WT. POIDS BRUT	NET WT. POIDS NET		
01	80	KG M PC	0 0 0	DAA-897105-2 D2500-1-190	6061 / T6 190" +5/16 " -0 "	MILL CERTIFICATE OF COMP (+010-010,0088-0072)	3	816	798 304.04 63	KG M PC	17 8 1
				DETAIL; LOT/TICKET		87380010 / 246417 87380010 / 246418 87380010 / 246419	1 1 1	298 298 220	292 292 214		23 PC 23 PC 17 PC
							3	816	798	KG	
									304.04	M	
									63	PC	
TOTALS/TOTAUX											

IM NO. B1065 REV. C

RETURN MATERIALS WILL BE ACCEPTED FOR CREDIT WITHOUT PERMISSION
L'UN RETOUR DE MATÉRIEL NE SERA ACCEPTÉ POUR CRÉDIT SANS AUTORISATION

SHIPPER
EXPÉDITEUR

PAGE

1

FOR ACKNOWLEDGEMENT OF GOODS DELIVERED AND CONDITION/RECONNAISSANCE DU CLIENT DU MATÉRIEL LIVRÉ

